



2015 IAA Planetary Defense Conference:
13-17 April 2015, Frascati, Italy
www.pdc2015.org

Call for Papers

The 2015 PDC will include an **impact threat exercise**, where participants will simulate the decision-making process for developing deflection and civil defense responses to a threat posed by **hypothetical** asteroid 2013 PDC15. Information on the evolution of the threat up to the date of the conference will be posted at a website to be announced. Attendees are invited to use 2013 PDC15 as a subject for their own exercises and for papers that might be presented at the conference. Priority slots for presentation of papers focused on aspects of the 2013 PDC15 threat will be available. The final period of the threat's evolution will be provided in periodic updates during the conference, and participants will develop a set of actionable recommendations based on that information.

In addition to topics related to the 2013 PDC15 threat, papers are solicited in the areas listed below:

Planetary Defense – Recent Progress & Plans

- Current national and international funded activities that support planetary defense
- Program status and plans (e.g., NASA's NEO program, ESA and EU NEO & SSA program)
- Recently conducted NEO threat simulation and disaster mitigation exercises

NEO Discovery

- Overviews of current ground and space-based discovery statistics
- Current discovery and follow-up capabilities, and advances in utilizing archival data
- Orbital refinements including non-gravitational effects and keyholes
- New surveys expected to be operational within the current decade

NEO Physical Characterization that Informs Mitigation

- Size distribution, albedos, composition, densities, rotation rates, etc.
- Lessons learned from recent observing programs and plans for improvements
- The smaller NEOs (≤ 300 m): assessing the physical properties of the more frequent impactors

Mitigation Techniques & Missions

- Dealing with short warning threats
- Promising technologies for asteroid deflection/disruption
- Flight validation/demonstration missions for planetary defense technologies
- Robotic and human NEO exploration missions that benefit planetary defense

Impact Effects that Inform Warning, Mitigation & Costs

- Information from the geological record and recent history (e.g., Chelyabinsk, Tunguska)
- Consequences of ocean and land impacts
- Economic and other costs of impacts and threat mitigation

Consequence Management & Education

- Policy or legal analysis that will affect or inform future mitigation plans
- Educating the public and the media on NEO detection, impact effects, mitigation missions, impact warnings
- Strategies for developing disaster response plans across international borders
- Lessons learned from regional and international disasters that provide insights for planetary defense

ABSTRACT SUBMITTAL: Technical paper abstracts submission (250 to 500 words in length) is open from September 1st 2014 until January 07, 2015. Abstract submission (<http://www.pdc2015.org>) in the areas described above or related to planetary defense should be sent to iaapdc@iaaemail.org. Please be sure to designate the topic area your paper addresses (see topics listed above). The deadline for receipt of abstracts is **January 07, 2015**. Letters of official acceptance will be mailed on or before January 21, 2015.



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PAPERS: The conference will use the “no paper, no podium” rule. Papers are preferred but Extended Abstracts will also be accepted. Papers are due by close of business on **April 3, 2015**. Revisions and corrections to previously submitted papers will be accepted within two weeks after the end of the conference. The formats for papers are specified on the conference web site. Accepted papers (including poster papers, and briefing charts) will be published on the official conference website.

STUDENT COMPETITION: One or more of the best student paper(s) will be awarded a prize. The aim of the student competition is to help promote academic work and informed political debate by enhancing research and general understanding essential for sound decision making on NEO impact threats in years to come.

VENUE: Frascati is a town in the province of Rome in the Lazio region of central Italy. It is located 20 kilometres (12 mi) south-east of Rome, on the Alban Hills close to the ancient city of Tusculum. Frascati is closely associated with science, being the location of several international scientific laboratories. Frascati is renowned for its white wine, Frascati. It is also an important historical and artistic centre. Earth Observation missions of the European Space Agency are based in ESRIN in Frascati.



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For more information and to access past PDC conferences, please visit:

<http://www.pdc2015.org>